

REMARKS

Reconsideration of the application, as amended, is respectfully requested.

Frozen food cabinets, such as ice cream cabinets, are well known in retail shops in many parts of the world. A disadvantage of the use of such cabinets is that, while many ice cream products must be stored at or below -18°C or less, this temperature is too low for some products such as soft ice cream. It is desirable to have a way to store such products without the need for additional freezer cabinets. Not only do additional freezer cabinets take up room; freezer cabinets have power requirements as well.

The invention is, therefore, directed to a display and dispensing assembly for use in combination with a freezer cabinet which has an internal temperature T_1 . The display and dispensing assembly includes a housing, a chamber within the housing in which products can be stored and from which they can be dispensed, first heat transfer means within the housing, second transfer means which may be placed inside the freezer cabinet, and means for circulating a heat transfer fluid throughout the first and second heat transfer means, the products being stored at a temperature of T_2 , which is higher than T_1 .

Claim 1 has been amended to place it in better form for presentation in the U.S., as supported in the beginning of paragraph [0020]. Claim 1 has also been amended to delete a feature which was added by amendment (the "pumped external" feature). Claim 1 has also been amended to recite that the first and second heat transfer means are connected by tubes which pass over a side wall of the cabinet, recited in part in claim 3.

Jirel, U. S. Patent No. 3,204,421 is directed to a cooler which is disposed over a portion of the open top of a freezer. The freezer includes refrigerator coils in opposite walls. The coils comprise portions of a conventional type of refrigeration system. Jirel's freezer includes a fan blade 62 which upon operation of a motor sends air upwardly from the interior of the freezer through a housing 66 of the cooler. The air is, of course, refrigerated. Thereafter, the refrigerated air passes downwardly into the upper end of a housing 76 and is returned into the freezer.

As illustrated in Fig. 3, Jirel's cooler sits atop his freezer. It is not apparent how the Jirel's cooler could be disposed otherwise. Instead of Jirel's built in housings which are used to circulate cold air from the freezer into the cooler, applicants employ a second heat transfer means which is part of the display and dispensing assembly but can be placed in the freezer. Therefore, the Jirel arrangement would appear to lack the flexibility of applicants' arrangement and Jirel does not suggest such a flexible arrangement. Indeed, Jirel would seem to require that the cooler be made specifically for the freezer, whereas the present arrangement is more flexible.

Claim 1 recites that the display and dispensing assembly comprises a housing located externally of the freezer cabinet, first heat transfer, means within the housing, and second heat transfer means which may be placed inside the freezer cabinet. Thus, even though it may be placed in the freezer cabinet, as noted above the second heat transfer means forms part of the display and dispensing assembly. On the other hand, the second heat transfer means 46, 48 pointed to by the Office is located within the freezer and does not form part of Jirel's cooler. Claim 1 has been amended to emphasize that the second heat transfer means is a part of the display and dispensing assembly. Jirel does not suggest this arrangement. Claim 1 as amended further distinguishes Jirel by reciting that the first and second heat transfer means are

connected by tubes which pass over a side wall of the cabinet. This flexible arrangement is not suggested by Jirel.

The Office points to no teaching of many features recited in the dependent claims. For instance, Claim 3 recites that second heat transfer means is connected to the first by flexible tubes. The Office points to no teaching of this in the arrangement of Jirel. Also, Claim 17 is presented herein. Claim 17 combines the subject matter of claims 2 and 3. Claim 17 recites that the display and dispensing assembly includes a second heat transfer means which is connected to the first heat transfer means by flexible tubes which pass over a sidewall of the freezer cabinet and wherein the second heat transfer means comprises pipework housed around a casing of a thermally conducted material.

The Office points to no teaching by Jirel of a second heat transfer means which comprises piping housed around a casing of a thermally conducted material which is connected to a first heat transfer means by flexible tubes which pass over a sidewall of a freezer cabinet and wherein the second heat transfer means may be placed inside the freezer cabinet, e.g., it is free of restraining structure which would prevent it from being placed inside the freezer cabinet.

Claim 16 retains the "pumped external" language and recites that the first and second heat transfer means comprise pipework. There is no suggestion of such an arrangement by Jirel. The language reciting a freezing point has been deleted.

It may be noted that in the present invention the cooling fluid will remain in the heat transfer means. Thus, after pumping ceases, there will still be some coolant in the housing to continue to keep the housing cool for a period of time. In contrast, the Office points to no means in Jirel et al. for cooling to continue once circulation of the cooling air from the freezer has ceased.

Lane et al., U.S. Patent No. 6,185,951 is cited as disclosing a display case having an external fluid which is distributed to a cabinet 10 by a pump 18. Even if this were so, it does not remedy the deficiencies of Jirel noted above, especially the lack of a second heat transfer means which is part of the display and dispensing assembly and which is sufficiently free to be placed inside the freezer cabinet.

In view of the foregoing, it is respectfully requested that the application, as amended, be allowed.

Respectfully submitted,



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